

09900700.07060.1

GAATTCCGGGTGGGTAGGTTCGGGCAGGGTAGGACAGGCCAAGAGAGAGGCCGGACAGACCTCC
TTTGGAAGCAGCCACTTCTGGTCCCCATCCCTGGAGCGATCGAGCGCAGGATCTGCTGTCCCAT
GGGACAGCAGATCTCTCTTCCCAGTGCACAGCTTCTCCTCTGCCTGTTTTCCCTGCTTCCAGTG
CTCCAGGTGGCCCAACCAGGCCAGGCACCCCAGGACCAGCCCCTGTGGACACTTTTGGAGCAGT
ACTGCCACAGGACCACAATTGGGAATTTTTCAGGTCCCTACACCTACTGCAACACGACCTTGGA
CCAGATCGGGACCTGCTGGCCACAGAGCGCACCCGGAGCCCTAGTAGAGAGACCGTGCCCCGAG
TACTTCAATGGCATCAAGTACAACACGACCCGGAATGCCCTACAGAGAGTGCCTGGAGAACGGGA
CCTGGGCCTCAAGGGTCAACTACTCACACTGCGAACCCTATTTTGGATGACAAGCAGAGAAAAGTA
TGACCTGCATTACCGAATCGCCCTCATTTGTCAACTACCTGGGTCACTGTGTTTTCCGTGGTGGCC
CTGGTGGCCGCTTTTCTGCTTTTTCCTAGTGCTGCGGAGTATCCGCTGCCTGAGGAATGTGATCC
ACTGGAACCTCATCACCACTTCATTCTGAGAAACATCGCGTGGTTTCTGCTGCAACTCATCGA
CCACGAAGTGCACGAGGGCAATGAGGTCTGGTGGCGCTGCATCACCACTCTTCAACTATTTT
GTGGTCAACCACTTCTTCTGGATGTTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTCATGA
CGTACTCCACAGAGCACCTGCGCAAGTGGCTTTTTCCTCTTCATTGGATGGTGCATTTCCCTGCCC
TATCATCATCGCCTGGGCAGTTGGCAAACCTCTACTATGAGAATGAGCAGTGCTGGTTTTGGCAAG
GAAGCTGGTGATTTGGTGGACTACATCTACCAGGGCCCCGTCATGCTTGTGCTGTTGATCAATT
TTGTATTTCTGTTTAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATCCACCACGTCCGA
GACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTTCCTCCTCCCCCTGTTGGGCATCACC
TACATGCTCTTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCAGATTGTGTTTCATCTACTTCA
ACTCTTTTCTGAGTCCTTCCAGGGTTTCTTTGTGTCCGTTTTCTACTGCTTCTTCAATGGAGA
GGTGC GCGCGGCCCTGAGAAAGCGGTGGCACTCGGGGCAGGACCACCACGCCCTCCGGGTGCCT
GTGCGCCGGGCCATGTCCATCCCTACGTCGCCCACCAGGATCAGCTTCCACAGCATCAAGCAGA
CAGCTGCTGTGTGACCCTCTGTACCGTCTGCCCAGGAGTCCACCACTGAGGCAGCTTCTCCAT
CCTTTACAGCCTTCCCCTGGGTCTCCTTGCTACCCTGACCCACAGGTACAAGGTACAGGAGAA
GGGAGGAGAACGAACACTCCC (SEQ ID NO:1)

FIGURE 1

underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

GAATTCCGGGTGGGTAGGTGCGGCAGGGTAGGACAGGCCAAGAGAGAGGCCGGACAGAC
CTCCTTTTGAAGCAGCCACTTCTGGTCCCATCCCTGGAGCGATCGAGCGCAGGATCTGC
TGTCCTATGGGACAGCAGATCTCTCTTCCAGTGCACAGCTTCTCCTCTGCCGTGTTTTCC
CTGCTTCCAGTGCTCCAGGTGGCCCCAACCAGGCCAGGCACCCCAGGACCAGCCCCGTGTGG
ACACTTTTGGAGCAGTACTGCCACAGGACCACAATTGGGAATTTTTTCAGGTCCCTACACC
TACTGCAACACGACCTTGGACCAGATCGGGACCTGCTGGCCACAGAGCGCACCCGGAGCC
CTAGTAGAGAGACCGTGCCCCGAGTACTTCAATGGCATCAAGTACAACACGACCC [GGAA
TGCCTACAGAGAGTGCCCTGGA] GAACGGGACCTGGGCCTCAAGGGTCAACTACTCACACT
GCGAACCCTATTTGGATGACAAGCAGAGAAAAGTATGACCTGCATTACCGAATCGCCCCCA
TTGTCAACTACCTGGGTCACTGTGTTTTCCGTGGTGGCCCTGGTG [GCCGCTTTCCTGCTT
TTCCTAGTGCTGCG] GAGTATCCGCTGCCTGAGGAATGTGATCCACTGGAACCTCATCAC
CACCTTCATTTCTGAGAAACATCGCGTGGTTTCTGCTGCAACTCATCGACCACGAAGTGCA
CGAGGGCAATGAGGTCTGGTGCCGCTGCATCACCACCATCTTCAACTATTTTGTGGTCAC
CAACTTCTTCTGGATGTTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTCATGACGTA
CTCCACAGAGCACCTGCGCAAGTGGCTTTTCTCTTCAATTGGATGGTGCATTCCCTGCCC
TATCATCATCGCCTGGGCAGTTGGCAAACCTCTACTATGAGAATGAGCAGTGCTGGTTTGG
CAAGGAAGCTGGTGATTTGGTGGACTACATCTACCAGGGCCCCGTCATGCTTGTGCTGTT
GATCAATTTTGTATTTCTGTTTAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATC
CACCACGTCCGAGACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTCCTCCTCCC
CCTGTTGGGCATCACCTACATGCTCTTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCA
GATTGTGTTTCATCTACTTCAACTCTTTCTGTCAGTCTTCCAGGGTTTCTTTGTGTCCGT
TTTCTACTGCTTCTTCAATGGAGAGGTGCGCGCGGCCCTGAGAAAGCGGTGGCACTCGGG
GCAGGACCACCACGCCCTCCGGGTGCCTGTGCGCCGGGCCATGTCCATCCCTACGTGCGC
CACCAGGATCAGCTTCCACAGCATCAAGCAGACAGCTGCTGTGTGACCCTCTGTACCCGT
CTGCCCGGCAGTCCACCACTGAGGCAGCTTCTCCATCCTTTACAGCCTTCCCCTGGGTCC
TCCTTGCTACCCTGACCCACAGGTACAAGGTACAGGAGAAGGGAGGAGAACGAACACTCC
C

FIGURE 2A

Gene Sequence Structure

*

441 bp

Sequence Deleted

582 bp

Size of full-length
cDNA: 1557 bp

Targeting Vector* (genomic sequence)

Construct Number: 3050

Arm Length:

5': 3.1 kb

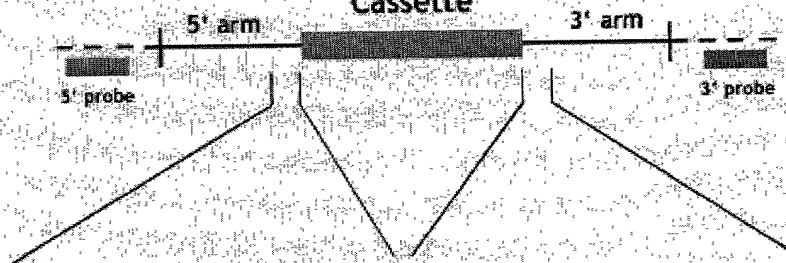
3': 2.5 kb

Targeting Vector
Endogenous Locus

* Not drawn to scale

LacZ-Neo

Cassette



5' >AGCCCTATGTGTAATTTTCAT
ATAAATGACTCATATTAGCTTTCA
GATATGCATTGTGTTTTTCAGGTCT
GGGAGAACTAAGGAGTGTGGACCT
TATCCTGCAGGTACTAGGGAGCCA
GGGAGGGCTTTTGAGGCGGGAGGG
CGTCCTGACTCTCAGTGGTTGGCA
TCTTCTCTAGGGAATGCCTACAGA
GAGTGCCTGGA<3'
(SEQ ID NO:2)

5' >GCCGCTTTCCTGCTTTTCCTA
GTGCTGCGGTGAGTCCACCTCCAC
CCTGCTTCCTCCTTGTCTTTGCCT
CTCCAGACATTGTCTCTTCCATT
CTGGGGCCCCGGGAACAGTAGCCA
GAAGTGGGTTAAGTCAGACCCCC
AGGGCCATGACCACCAGCCTGCCT
GAAGGGTAGAGAGCAAGCCCAGCT
GGGACCACCAG<3'
(SEQ ID NO:3)

FIGURE 2B